

REMARKS

Claims 1, 3-7, 9-14, and 16-22 and 24 are pending in the application. Allowance of the pending claims is requested in light of the following remarks. By this paper, Claims 1, 7, 13 and 18 are amended. Support for the pending amendment may be found throughout the specification and particularly in the as filed claims.

35 U.S.C. § 101

Claims 1, 3-7, 9-14, and 16-22 and 24 are pending a rejection under 35 U.S.C. §101. Applicant traverses the rejection. While Claims 1, 7, 13 and 18 are currently amended to further prosecution, Applicant reserves the right to claim the subject matter in the as filed application. The Office's contentions with respect to compliance under 35 U.S.C. § 101 is believed to be an unnecessarily narrow interpretation of the United States' Patent Laws as the laws currently exist.

As amended, independent Claim 1 is drawn to one or more computer readable media having stored thereon a plurality of instructions that, when executed by a computer, cause the computer to perform acts and in part recites,

- “in response to a user input to raise gain in one band of a multi-band computer implemented equalizer, computing a lower gain for at least one other band of the equalizer;
- implementing said lower gain for the at least one other band of the equalizer in the equalizer to output a signal with reduced distortion in the at least one other band of the equalizer.”

Claim 1 is within a class of patentable subject matter as Claim 1 recites one or more computer media (e.g., subject matter which is embodied in a tangible form). Additionally, the program of instructions, included thereon may cause a computer to implement "said lower gain for the at least one other band of the equalizer in the equalizer to output a signal without distortion in the at least one other band of the equalizer." In instances, audio distortion may be introduced if gain input is improperly conducted. *Instant Application*, Page 1 and 2. For example, "[d]istortion may be introduced by increased power in the audio signal if the audio signal amplitude is in a non-linear region of the amplification circuitry." *Instant Application*, Page 1, lines 15-17. Other embodiments are discussed as well. As generally recited in amended Claim 1, the plurality of instructions may cause the processor to "compute a lower power gain for at least one other band of the equalizer" "in response to a user input" such that "implementing said lower gain for the at least one other band of the equalizer in the equalizer to output a signal without distortion in the at least one other band of the equalizer." Thus, for example, overcoming drawbacks previously experienced in which user selected gain may result in distortion. In this manner, a tangible result may include at least preventing a user, from causing distortion by inputting gain in one band such that a distortion is generated in the at least one other band. The presently recited subject matter is within the purview of 35 U.S.C. §101 as the subject matter has utility which may result in a useful, tangible result (e.g., implementing said lower gain for the at least one other band of the equalizer in the equalizer and outputting

a signal without distortion in the at least one other band) among other uses. M.P.E.P. §2106 (IV) (c). Removal of the pending rejection under 35 U.S.C. §101 is requested in light of the instant amendment and above arguments. Allowance of independent Claim 1 is respectfully requested.

The rejection of **Claims 3-6** is believed to be improper based on the claims' dependence from an independent claim which is believed to be in a condition for allowance. Additionally, Claims 3-6 recite additional features which are not recited in the art of record. Removal of the pending rejection under 35 U.S.C. §101 is respectfully requested and allowance is solicited.

As amended, **Claim 7** in part recites,

- “a memory;
- a processor operatively coupled to the memory; and
- a routine stored in the memory that when executed by the processor causes the processor to perform actions including computing a lower gain for at least one first band of a multi-band equalizer in response to a user input to raise gain in a second band of the equalizer, and implementing said lower gain for an output signal in the at least one first band of the equalizer.”

Claim 7 within 35 U.S.C. § 101, because the claim in part recites a memory, having a routine stored therein that when executed “causes the processor to perform actions including computing a lower gain for at least one first band of a multi-band equalizer in response to a user input to raise gain in a second band of the equalizer, and implementing said lower gain for an output signal in the at least

one first band of the equalizer.” Claim 7 is patentable as a system is recited which may cause an included processor to calculate and implementing said lower gain for an output signal in the at least one first band of the equalizer. In this manner, output signal distortion in the at least one first band of the equalizer may be avoided. *Instant Application*, Page 1, lines 15-17. The present subject matter is patentable because a computed lower gain may be implemented to “lower gain for at least one first band” . . . “in response to a user input.” The foregoing resulting in the tangible result of lowering gain for a first band in response to a user input to raise gain in a second band which may avoid output signal distortion. Removal of the pending rejection over 35 U.S.C. § 101 is requested, for at least the above reasons, and allowance is solicited.

The rejection of **Claims 9-12** is believed to be improper based on each claims dependence from an independent claim which is believed to be in a condition for allowance. Additionally, Claims 9-12 recite additional features which are not recited in the art of record. Removal of the pending rejection under 35 U.S.C. §101 is respectfully requested and allowance is solicited.

As amended, **independent Claim 13** in part recites a method including,

- “in response to raising a gain in one band of a multi-band equalizer, calculating an approximately uniform lower gain in the other bands of the equalizer; and”

- “adjusting the gain of the equalizer in each band according to the raised gain in the one band, and the calculated gain in the other bands so that the equalizer output signal is not distorted.”

Claim 13, as amended, is patentable under 35 U.S.C. § 101 because the claim recites a method including adjusting the gain of the equalizer in each band according to the raised gain in the one band, and the calculated gain in the other bands so that the equalizer output signal is not distorted. The subject matter is patentable because the method may result in the adjustment of the gain of the equalizer according to . . . the calculated gain in the other bands so that the equalizer output signal is not distorted. Thus, the method may result in the adjustment of the gain of the equalizer according to the raised gain and the calculated gain such as to prevent output signal distortion which may be associated with a raise in the gain in one band of a multi-band equalizer which may prevent the drawbacks previously experienced. Removal of the pending rejection under 35 U.S.C. § 101 is requested and allowance is solicited.

The rejection of **Claims 14, 16 and 17** is believed to be improper due as each claim is dependent from an independent claim which is believed to be in a condition for allowance. Additionally, Claims 14, 16 and 17 recite additional features which are not recited in the art of record. Removal of the pending rejection under 35 U.S.C. §101 is respectfully requested and allowance is solicited.

Claim 18 is patentable under 35 U.S.C. § 101, because the claim in part recites an audio system including,

- “first means for determining a lower gain for at least one first band of a multi-band equalizer in response to a user input to raise gain in a second band of the equalizer;
- second means for providing a user input to raise gain in a second band of the equalizer to said first means;
- means for adjusting the gain of the equalizer in each band according to the raised gain in the second band, and the lowered gain in the first bands to adjust the equalizer output signal to prevent distortion.”

As amended, Claim 18 recites patentable subject matter under 35 U.S.C. §101 because an audio system including means elements is within a class of patentable subject matter. Additionally, the subject matter is patentable because the included mean element recite the function of “adjusting the gain of the equalizer in each band according to the raised gain in the second band, and the lowered gain in the first bands to adjust the equalizer output signal to prevent distortion” which results in the useful tangible result of preventing equalizer output signal distortion. Removal of the pending rejection under 35 U.S.C. §101 is respectfully requested and allowance is solicited.

The rejection of **Claims 19-22** is believed to be improper due as each claim is dependent from an independent claim which is believed to be in a condition for allowance. Additionally, Claims 19-22 recite additional features which are not

recited in the art of record. Removal of the pending rejection under 35 U.S.C. §101 is respectfully requested and allowance is solicited.

Claim 24 is allowable as the claim recites a computer system comprising the audio system recited in claim 18. As amended Claim 18 recites patentable subject matter which may be implemented to adjust the gain of the equalizer. Removal of the pending rejection under 35 U.S.C. §101 is respectfully requested and allowance is solicited.

Conclusion

All of the claims are in condition for allowance. Accordingly, Applicant requests a Notice of Allowability be issued forthwith. If the Office's next anticipated action is to be anything other than issuance of a Notice of Allowability, Applicant respectfully requests a telephone call for the purpose of scheduling an interview.

Respectfully Submitted,

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